'A new look at the English landscape': landscape architecture, movement and the aesthetics of motorways in early postwar Britain

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In the past decade or so geographers have been arguing for more performative, practice-oriented and non-representational accounts of the ways in which people encounter, move through and inhabit landscapes, spaces and places. In this paper I argue that these theoretical concerns should also prompt geographers to explore the fairly long history of critical commentaries and aesthetic interventions by writers, artists, film-makers and landscape practitioners who have shown a sensibility to movement and embodied practices in the landscape. The paper then examines how landscape architects focused their attention on the movements, speed and visual perspective of vehicle drivers in their arguments for the landscaping and design of motorways in early postwar Britain. During the 1940s the Institute of Landscape Architects pushed for the involvement of their members in the landscaping and planting of all future roads, and prominent landscape architects criticized the tendency of local authorities and organizations such as the Roads Beautifying Association to plant ornamental trees and shrubs which would interrupt the flow of the landscape and distract drivers travelling at speed. Landscape architects such as Brenda Colvin, Sylvia Crowe and Geoffrey Jellicoe argued for a focus on simplicity, flow and the visual perspective of drivers, and the government's Advisory Committee on the Landscape Treatment of Trunk Roads applied similar criticisms to the work of Sir Owen Williams and Partners in designing and landscaping the earliest sections of Britain's first major motorway, the London to Yorkshire Motorway or M1. The paper examines how landscape architects pushed for a functional modernism to be constructed around the movements and speed of motorists, and it concludes by discussing how an admiration for foreign motorways was tempered by calls for a British motorway modernism reworked in regional and local settings.

> ... there are two different things at stake here: styles of motorway design, and styles of seeing.[1]

In his 1972 article 'New way north', Reyner Banham reviewed the near-complete chain of motorways linking London and Scotland. Amidst his reflections on the design of – and experience of driving along – the different stretches of motorway, Banham was

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critical of 'the conventional vision' which 'fails to notice the ... virtues' of the landscapes of the motorway, and fails to understand the moving viewpoint and 'plunging perspective' of car travel.[2] Driving a car was seen to enact very different experiences and sensory engagements to those associated with *either* a stationary viewer *or* the more 'detached', 'passive' passenger who gazes at the 'continuous panorama' framed by the side windows of trains or stage coaches.[3] Banham's article is important because it indicates how more recent academic concerns with the mobile gaze – which have built upon the writings of philosophers and historians of modern vision[4] – can be situated in a fairly long history of critical commentaries, explorations and aesthetic interventions by writers, artists, academics, landscape practitioners, engineers, dancers, musicians and film-makers who have explored the relations and tensions between landscape, movement, practice, vision and being in the landscape in their attempts to provide artistic works or practical landscaping solutions.

This genealogy of sensibilities to movement in the landscape may also prompt academics to widen their readings of recent calls by geographers, anthropologists and architects for more performative, practice-oriented and non-representational accounts of the ways in which people encounter, move through and inhabit landscapes, spaces and places.[5] Thus while the 'challenge for cultural geographers of landscape' may be 'to produce geographies that are lived, embodied, practised; landscapes which are never finished or complete, not easily framed or read',[6] there is clearly a need for cultural and historical geographers to trace these genealogies of sensibilities to movement and embodied practices in the landscape through the written texts and performances of others, as well as utilizing more engaging and participative methods to encounter landscapes and perform or communicate their geographies to different audiences.[7] It is worthwhile to briefly outline some of these earlier artistic, architectural and authorial engagements with the dynamism of moving through the landscape.

In his 1958 essay 'The abstract world of the hot-rodder', J.B. Jackson – who wrote widely on the vernacular geographies of the roadside strips and suburban landscapes of the USA – provided the readers of his journal, *Landscape,* with a quasi-phenomenological description of the experience of moving through the landscape at speed. Jackson reflected on the importance of different views of the landscape and the excitement of the thrill-seeking hot-rodder or sportsman, who

> enters a world of his own, new and at the same time intensely personal; a world of flowing movement, blurred light, rushing wind or water; he feels the surface beneath him, hears the sound of his progress, and has a tense rapport with his vehicle. With this comes a sensation of at last being part of the visible world, and its center.[8]

Jackson's landscape vernacular arose from a 'distrust of formal theory', a concern with the symbolism of landscapes and a passion for driving across the American landscape in his truck and on his motorcycle.[9] At the same time, however, American architects and landscape architects saw the need for more formal and diagrammatic techniques for notating the viewpoints and experiences of drivers so that more universal design principles could be distilled and codified. In the early 1960s Donald Appleyard, Kevin Lynch and John Myer's pioneering architectural study *The view from the road* used

notations of movement and visual sequences along Boston's urban expressways in an attempt to show how well-designed roads could 'make our vast metropolitan areas accessible', with 'a dramatic play of space and motion, of light and texture, all on a new scale'.[10] In the mid-1960s landscape architect Lawrence Halprin utilized techniques from modern dance choreography – which were used by his wife, the well-known avant-garde dancer, Ann Halprin – to develop a form of movement notation that would help him understand the movements and experiences of vehicle drivers traversing the landscape.[11] In a very different context – late 18th- and early 19th-century Britain – Humphry Repton expressed his belief that well-designed roads could compose 'parkland into pictorial scenes, both in the view of the road and from it'.[12] In the 19th century, commentators discussed the visual experiences and sensibilities associated with dioramas, panoramas and rail travel – which were felt to cut against picturesque ways of framing and viewing the landscape – while artists, photographers and film-makers have long been engaging with experiences of mobility and reflecting upon the aesthetic and non-representational dimensions of movement and travel.[13] The *Landscape* exhibition organized by the British Council in 1998 included a series of landscape paintings by Paul Winstanley of the view from a moving car, as well as Rachel Lowe's video installation *Letter to an unknown person no. 6*, in which a hand traces the visual features of a passing landscape onto the side window of a car, highlighting the futility of attempting to fix such visual impressions, and questioning 'the possibility of representation'.[14]

Artists have engaged with the embodied movements and viewpoints of the motorist and traveller in many other ways, and what these different practical, aesthetic and philosophical interventions have tended to refract is a belief in the futility or impossibility of trying to capture the dynamism or producing realist representations of movements which have been assuming a greater significance in people's everyday lives for several centuries. Nevertheless, artists *have* responded by trying to express the dynamism of the driver's view through a windscreen using paint. Designers have developed new notation techniques for recording and choreographing the visual sequences along a stretch of road. Writers have reflected upon the embodied, phenomenological aspects of travelling through the landscape. In this paper I focus on one particular moment in this history of sensibilities to, or engagements with, mobile practices in the landscape: the debates surrounding the landscaping of motorways in early postwar Britain.

In the first section of the paper I examine the work of members of the Institute of Landscape Architects (ILA) in early postwar Britain, focusing on debates surrounding the landscaping and planting of the nation's roads and motorways. While there is a fairly extensive critical literature on the role of architects, planners and designers in Britain's post-war reconstruction,[15] and on the landscaping of the German autobahns and American parkways and freeways,[16] very little has been written about the work of landscape architects – on and off the road – in early postwar Britain.[17] I examine how the ILA attempted to position landscape architecture at the heart of plans for postwar reconstruction, and how figures such as Brenda Colvin, Sylvia Crowe and Geoffrey Jellicoe emphasized the vital role that landscape architects could play in the design of

Britain's future motorway network. Landscape architects explored how the driver's mobile viewpoint and a range of English landscape traditions must form the basis for contemporary motorway designs, and they contrasted their holistic approach with the narrow horticultural concerns of groups such as the Roads Beautifying Association. In section two I examine the work of the government's Advisory Committee on the Landscape Treatment of Trunk Roads and prominent landscape architects in attempting to influence the design and planting of the earliest sections of the London–Yorkshire Motorway (M1), which were opened to the public on 2 November 1959. The M1 was Britain's first major motorway – built at a time of rising prosperity and increasing levels of car ownership – and the design, construction, and experience of driving along the motorway was seen to be exciting and modern in the late 1950s and early 1960s.[18] Nevertheless, architects and landscape architects were highly critical of the architecture and planting proposals for this largely experimental motorway. The Landscape Advisory Committee cast a critical eye over the planting schedules proposed by the engineer's landscape consultants, and they blocked proposals for ornamental species of tree and shrub which they felt to be too detailed, small-scale and distracting to be appreciated by the motorist travelling at high speed. Landscape architects remarked upon the absence of a sense of visual flow and movement in the landscapes of M1, and they criticized the landscaping and planting of the motorway service areas which did not account for the tastes, experiences and movements of different kinds of motorist.

Landscape architecture and the modern road

> In matters concerning landscape and gardens in Britain it seems that the advice of the gardener, or of some commercial firm, or even an amateur is still considered good enough by self respecting Public Bodies who would quite appreciate the need for professional advice in matters concerning architecture, engineering or health. The profession of Landscape Architecture has yet to reach the point where it is felt to be indispensable in its own field.[19]

Amidst the planning conferences and public debates about reconstruction which flourished during the Second World War, prominent figures in the Institute of Landscape Architects attempted to broaden their profession's sphere of influence. During the early 1940s an increasing number of architects and planners were elected as members of the Institute – including Patrick Abercrombie, Lord Reith, Clough Williams-Ellis, Thomas Sharp and Dudley Stamp – which sought to move away from its prewar image as a 'domestic garden society'.[20] At a meeting to discuss ILA policy in November 1942 – which was attended by representatives of planning, architecture, horticulture and amenity groups – the Vice-President of the Institute, Lady Allen of Hurtwood, stressed that future emphasis must be placed on 'the social value of our profession in a democratic age', as landscape architecture had previously 'been too closely identified with designing and making private gardens and estates'. Landscape architecture must be conceived as 'a *new* national service', and central and local government and other organizations must recognize the role that the profession could play in shaping the

nation's public spaces.[21] Landscape architecture was aligned with the prevailing 'planner-preservationist imagination',[22] and with the end of hostilities landscape architects started to gain commissions to work on major public projects, including new towns and the Festival of Britain sites.[23] As building restrictions were lifted in the early 1950s, and construction work diversified throughout the late 1950s and 1960s, landscape architects won commissions to landscape new university campuses, schools, forestry plantations, reservoirs, factories, power stations and housing estates. The ILA also sought involvement for its members in the landscaping and design of roads. Atlee's Labour government had announced its plans to reconstruct the national road network in May 1946,[24] but with ongoing economic crises and a focus on essential reconstruction work due to shortages of building materials and labour, the highways programme was shelved until the mid-1950s. Despite these cutbacks the Institute of Landscape Architects joined other organizations in working to ensure that landscape architects *would* be employed alongside engineers to lay out all future roads and motorways.

One of the key campaigners was Brenda Colvin, a founding member of the British Association of Garden Architects in 1928 (which became the ILA in 1929), who served as President of the Institute of Landscape Architects between 1951 and 1953.[25] In the Institute's journal, *Landscape and garden,* in 1939 Colvin criticized the prevailing British obsession with trying to '"beautify" the road', arguing that planting must be used 'to knit the highway into the landscape':

> unfortunately most of the planting that is being done still shows a misunderstanding of the principles involved, and an almost pathetic lack of vision. The logic of much of it seems to be based on the assumption that since flowering trees and shrubs are pretty and excite our admiration, the more of these and the greater the number of varieties we plant along the roads the more the roads will be 'beautified'.[26]

While Colvin doesn't name those who are doing the misplanting, contemporary readers may have guessed that she was referring to the work of the Roads Beautifying Association (RBA), whose horticultural experts had been advising local councils on roadside planting since 1928.[27] The RBA had produced planting schemes for many of the new bypasses and arterial roads constructed during the interwar years – including the Kingston bypass, Winchester bypass and Mickleham bypass. At one level their views do not appear that different from those of Brenda Colvin, for while she stressed that exotic trees and flowering shrubs *may* be appropriate for urban areas – where speeds are inevitably slower and the scale more domestic[28] – the Roads Beautifying Association stated their commitment to ensuring that only 'wild species' would be planted along country roads, and that 'garden hybrids and varieties' would be limited to urban or semi-urban areas.[29] Despite such assurances, the RBA came under heavy criticism from commentators who the Association's secretary, Wilfrid Fox, termed the 'pure English school':

> those who think that the scenery of England is so beautiful that if you make any changes or additions you are ruining the picture and that only trees and shrubs indigenous to England should be employed to adorn roads ...[30]

Fox argued that the Association were progressive modernizers continuing the work of several centuries of enlightened landowners and gardeners who had brought horticultural variety to the English landscape, but while he justified their planting policy in horticultural and ecological terms, he overlooked the criticisms of landscape architects such as Colvin who argued that the RBA took no account of the speed of vehicles, the experience of moving through the landscape and the aesthetics and overall landscape design of the road:

> Travelling at anything over thirty miles an hour, the details of flower and leaf count for very little; form and mass, light and shadow are the materials we must make use of, and these are also the requirements from the point of view of the more distant observer in the countryside.[31]

As Colvin stated in her 1948 book *Land and landscape*, beautiful modern roads would only result from a 'more fundamental' approach to landscape than the largely horticultural approach adopted by the Roads Beautifying Association.[32] Landscape architects and engineers should ensure that modern dual carriageway roads are 'fitted' to the contours and existing features of the landscape, so that the road 'will seem to belong happily to its surroundings' and the driver will be kept interested and enlivened.[33] Landscaping and planting must be functional: breaking the 'mechanical monotony of engine sound and road surface', keeping drivers 'alert and vigilant', preventing dazzle, framing attractive views, screening eyesores and breaking up the parallelism of the road.[34] Colvin stressed that the danger was one of doing too much, in too much detail: the 'English have become too garden-city minded'.[35] Small-scale ornamental plants might be suited to gardens 'seen at a walking pace', but the 'dramatic variations' characteristic of the English countryside would 'too easily be blurred and lost to the motorist by a lavish use of trees and shrubs of exotic or garden type', which would also prove costly to maintain. Local or regional vegetation could best highlight Britain's 'natural landscape variety', while the speeds and scale of modern motoring were ideal for the modern motorist to appreciate the beauty and regional variations of the nation's landscape.[36] Movement and speed are seen to be vitally important to the way we see, encounter and inhabit Britain's landscapes, and the role of the landscape architect and engineer must be to translate the speed, scale and function of a particular road into an appropriate landscape.

Colvin's friend and fellow landscape architect Sylvia Crowe provided a more extensive discussion of these themes in her 1960 book *The landscape of roads*, and both authors were keen to present solutions to landscape problems.[37] While Ian Nairn's highly influential 1955 *Outrage* special issue of the *Architectural review* had presented a rather gloomy account of the spread of a universal suburbia or 'subtopia' across the English landscape and along England's roads, Crowe's writings presented the architecture, planning and design community with positive examples of how modern industry, reservoirs, power stations and new roads could be fitted into, and even enhance, the landscape.[38] Her 1956 book *Tomorrow's landscape* was presented by the architectural critic Eric de Maré as a 'practical guide to the proper adjustment of our landscape' and as the first constructive reply to Nairn's 'prophecy of doom'.[39] Crowe suggested that while modern structures were frequently built on a vast scale, divorced

from our humanized landscape, 'we are faced with the alternatives of either linking them by siting and design with the existing scale or of creating around them a new landscape related to their own scale'.[40] In the case of roads it was the speed for which they were designed to be traversed which would, above all else, affect the scale of the road and its place in the landscape:

> The faster the speed for which it is designed, the further it must depart from the old pattern of the humanized landscape. This conflict between machine speed and human speed is part of the problem which confronts us throughout our mechanized civilization.[41]

As driving speeds increase, the landscape of the road must become more expansive, coherent and free from excessive detail and distractions. The challenge becomes one of composing a landscape which can be viewed or 'read' at speed, and Crowe suggested that landscape architects could learn a great deal from previous landscape and artistic traditions that developed 'principles of penetration and the moving viewpoint'.[42] Crowe placed two artistic traditions in contrast to the 'static' viewpoints of the 'classic conception of a landscape':

> modern painting and sculpture which exploits the strong directional line exploring the depths of a composition, ...[and] the English landscape school [which] developed the older Chinese conception of a landscape of movement, to be enjoyed as an unfolding scroll.[43]

By placing the modern motorway in this history of sensibilities to movement in landscape art and design, Crowe suggests not only that these traditions may provide 'a valid starting point' for landscape architects and engineers designing the modern road, but that the landscape architect and their finished landscapes are continuing a long-established artistic tradition.[44]

Crowe's genealogy of landscape design appears to owe much to a paper on the landscaping and design of motorways by her friend, and Past President of the Institute of Landscape Architects, Geoffrey Jellicoe.[45] Jellicoe had opened his address to the Town Planning Institute in 1958 with a critical discussion of the landscaping and design of motor roads in Germany and the USA, before stressing that the most important lessons would be learned from 'our own traditions and national characteristics', which are 'nowhere better expressed in Landscape than in the great English park'.[46] Jellicoe, like Crowe, provided a somewhat compressed and oversimplified history of English landscape design. He pointed to the important lessons of the 'art of the picturesque' before describing how the work of Humphry Repton is instructive for today's landscape architect; for it was he who taught us that 'a road that is agreeable to drive along, is also agreeable as static scenery in the surrounding landscape'.[47] As Stephen Daniels has shown, the mobilities of late 18th- and early 19th-century polite society – when Repton was conducting his work – became associated with new techniques for not only designing but also experiencing and conducting oneself in the landscape;[48] but Jellicoe stresses that while Repton sees the road as essentially 'subsidiary to the park, ... in modern England it is the road that organizes the landscape through which it passes'.[49]

Twentieth-century landscape architects argued that motorways must be designed around the movements and embodied vision of the high-speed motorist and composed

from specific features on a site; but Jellicoe also outlined a number of basic visual effects which appealed to the human eye and could be adjusted to the scale of any road. These effects were seen to be present in a 19th-century watercolour, *The shadowed road* (Figure 1), by the Norwich School painter John Crome (1768-1821), which reveals 'a complex of tree foliage, the incident of a cottage, the glimpse of a distant view, and an overall play of light and shade'.[50] While Jellicoe acknowledged that the picture was composed on an inappropriate scale for a motorway, he argued that the landscape architect merely had to translate the scene to the dimensions, scale and speeds of a modern road. The architectural critic Raymond Spurrier wondered whether Britain's highway engineers would pay any attention to Jellicoe's suggestions, as 'the average landscape of the average motor road in Britain' exhibited none of the compositional elements present in *The shadowed road*.[51] Britain's modern roads were badly aligned, boring, and adorned with poorly designed signs and vegetation, and there were few positive British roads to which landscape commentators could turn for inspiration. Crowe praised the siting and engineering of – but not the planting carried out by the Roads Beautifying Association on – the Mickleham bypass and Bix–Henley road,[52] while Jellicoe lauded the designers of the Oxford bypass for their separation of dual carriageways, incorporation of existing trees and hedges, and creation of

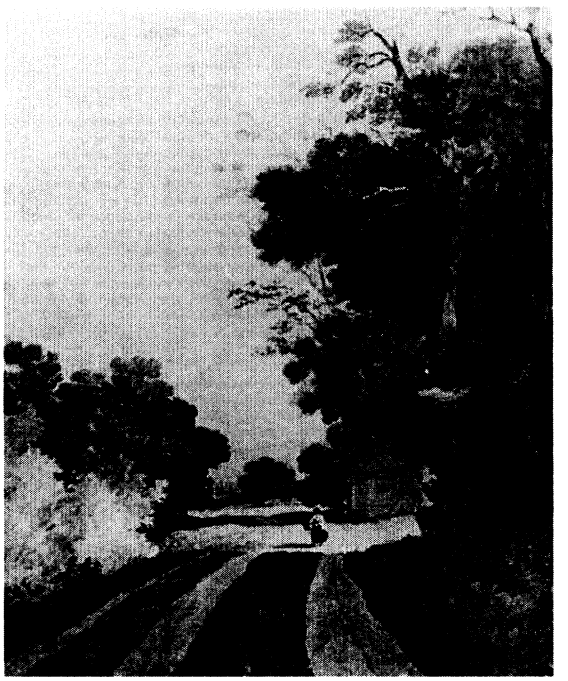

FIGURE 1 *The shadowed road*, c.1808-10. Watercolour by John Crome (1768-1821). The painting is usually titled *Landscape with cottages*. (Reproduced by permission of V&A Images/ Victoria and Albert Museum, London.)

'a scenery of the highest order'.[53] A photograph of the Oxford bypass by Geoffrey Jellicoe's wife, Susan, was included in his article and in Crowe's *The landscape of roads* with admiring captions, while a sketch which appears to be based upon this photograph was presented by Raymond Spurrier as 'the Shadowed Road – modern style' (Figure 2): the antidote to the average British road.[54]

The alignment of the views of Jellicoe, Crowe and the *Architectural review* writer Raymond Spurrier in their optimistic hope that contemporary landscape architects, engineers and designers could create modern motorways inspired by English landscape traditions is not surprising. While Jellicoe's approach to landscape design drew upon such diverse influences as modern abstract art, sculpture and, from the early 1960s, Jungian psychology,[55] the approaches that he, Crowe and Colvin proposed for landscaping Britain's roads and motorways had notable parallels with arguments about the importance of picturesque theories to the planning and design of Britain's townscapes and landscapes, which key figures associated with the *Architectural Review* had been developing from the early 1940s.[56] Nikolaus Pevsner, Hubert de Chronin Hastings, J.M. Richards and Gordon Cullen argued that 18th-century picturesque principles could provide a useful precedent for contemporary town planners, architects and landscape architects; showing how they might compose informal and varied layouts, views and relational compositions by using the materials – and respecting the distinctive design aesthetics – 'found' on a particular site.[57] While earlier proponents of the picturesque had presented movement and travel as antithetical to picturesque ways of seeing and experiencing the world, movement lay

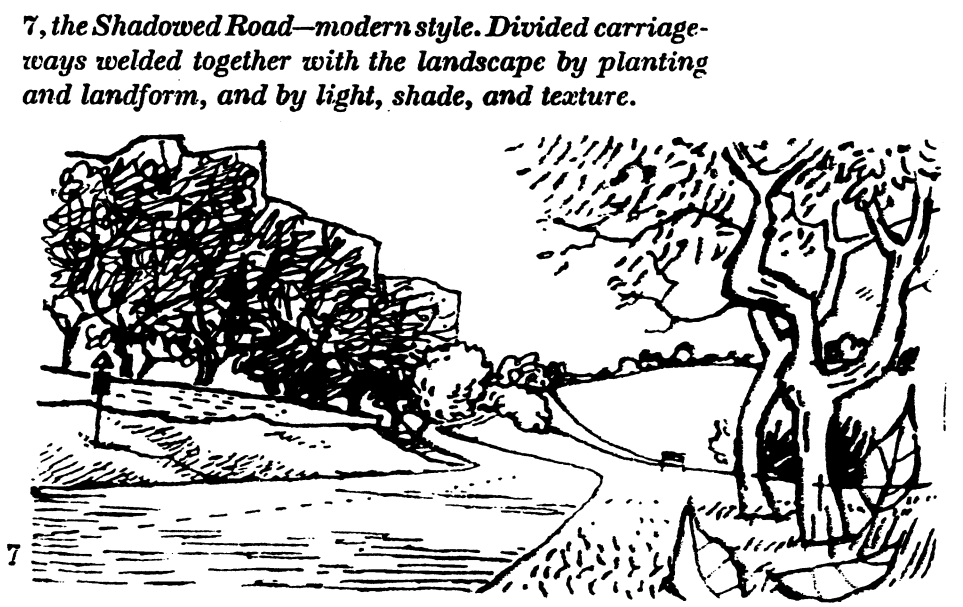

FIGURE 2 'The Shadowed Road – modern style'. Illustration accompanying an article by Raymond Spurrier. (Reproduced by permission of *The architectural review*.)

at the heart of neo-picturesque formulations of townscape and landscape. Just as Jellicoe thought about how drivers would encounter and move through the recomposed landscape of *The shadowed road* (modern style), 20th-century reformulations of the picturesque were framed as an opportunity to understand mobile encounters with 'the embodied, the differentiated, the phenomenal world'.[58] The *Architectural review* described how the picturesque layout of the South Bank site of the Festival of Britain – which was widely celebrated by admirers of the picturesque, and highly criticized by Brutalist architects and critics such as Reyner Banham – was 'contrived for the benefit of the moving, not the stationary, spectator',[59] while in 1956 the *Review*'s art editor, Gordon Cullen, pointed to the need to understand 'vision in motion' and establish a clear visual design code in order that roads may be considered as townscape or landscape.[60]

Drawing upon histories of landscape design, modern art and highway engineering, Colvin, Crowe and Jellicoe provided persuasive accounts of principles for designing and landscaping roads and motorways, but as high-profile landscape architects they also attempted to influence local and national government policy. During the Second World War Brenda Colvin prepared *Trees for town and country*, a guide to aid postwar reconstruction which included sections on roadside and street planting and was published for the Association of Planning and Regional Reconstruction in 1947.[61] The previous year she had chaired an Institute of Landscape Architects committee and prepared their report on *Roads in the landscape*.[62] Between 1949 and 1954 she served as the Institute's representative on a Council for the Preservation of Rural England committee concerned with the landscaping of roads,[63] while in 1955 she was appointed as the Institute's representative on the government's newly established Advisory Committee on the Landscape Treatment of Trunk Roads. The Landscape Advisory Committee, as they were commonly known, included such key figures as Clough Williams-Ellis (Council for the Preservation of Rural Wales), George Langley-Taylor (CPRE), Lord Rosse, Wilfrid Fox (RBA), Lord Bolton (Royal Forestry Society of England and Wales), Sir Eric Savill (Deputy Ranger, Windsor Great Park) and Dr George Taylor (Keeper of Botany, British Museum). At the Committee's inaugural meeting in April 1956, their chairman, Sir David Bowes-Lyon – President of the Royal Horticultural Society, and brother of Queen Elizabeth the Queen Mother – expressed his hope that they would 'advocate the use of indigenous trees and discourage the use of foreign trees ... which were uncharacteristic of the region'.[64] This approach echoed the principles of such organizations as the ILA and CPRE and was implicitly critical of the work of the RBA, and after just four meetings, one site visit, and an argument over central reservation planting, Wilfrid Fox resigned – citing his fundamentally different 'outlook' from 'the Chairman and other vocal members of the committee' as the reason.[65] The Committee's preference for indigenous, native species resonates with the push in Nazi Germany to plant native German species along the *Autobahnen* in Germany and Poland, but the discussions in 1950s Britain reflected ongoing debates amongst horticulturists, ecologists and landscape architects about the abilities of different plant species to survive and look right in the English landscape, *rather than*

entwining exclusionary nationalist political ideologies with debates about landscape, ecology and race.[66]

The Landscape Advisory Committee's first major project was to approve the detailed designs and planting for the initial sections of Britain's first major motorway, the London to Yorkshire motorway (M1). The route and preliminary designs had been established by the consulting engineers Sir Owen Williams and Partners during 1954 and 1955;[67] and as civil servants were concerned that the project might be delayed, the Committee were instructed to focus their attention on the more superficial aspects of design and planting.[68] This decision spurred the Institute of Landscape Architects to pressure the government to appoint qualified landscape consultants to advise on the design of the M1 and all future motorways. Geoffrey Jellicoe used his role as a Royal Fine Art Commissioner to ensure that the Commission's secretary pressed the Ministry on this matter,[69] which led government officials and Sir Owen Williams and Partners to hold a meeting to discuss suitable appointments with the President of the ILA (Richard Sudell) and Jellicoe in July 1956.[70] After discovering the recommended fees for landscape architects, it was eventually decided that the consulting engineers should employ their own consultants, and this decision – coupled with Sir Owen's appointment of two foresters, A.P. Long and A.J.M. Clay, rather than qualified landscape architects – resulted in a barrage of letters to the government and newspapers from the Institute of Landscape Architects, Royal Fine Art Commission, and Royal Institute of British Architects.[71] In a letter published in *The Times* in May 1959, the then President of the Institute of Landscape Architects, Sylvia Crowe, stated that the Landscape Advisory Committee was no 'substitute for built-in professional advice', and that 'those trained to assess the character of a landscape' must form an important part of the planning team 'from the reconnaissance stage onwards'.[72] The Ministry of Transport eventually appointed a landscape architect, Michael Porter, to their staff in 1961, but this was too late for the first sections of the M1.

'A new look at the English landscape': the design and planting of the M1 motorway

> A road is a flow channel; its virtues will be those of smoothness and easy flow – minimum changes of velocity in any direction. Its visual virtues will be similar; no abruptness, no interruption, no fussiness, until the road superimposes its own slow steady rhythm of turnout, service area and major destination on to the undertones of change of geology and land use.[73]

In his review of the M1 for the *Architects' journal*, civil engineer Alan Harris captured the emphasis of a broad range of landscape architects on the importance of a sense of flow and a mobile viewpoint in designing the landscapes of roads and motorways. With almost no involvement by the Landscape Advisory Committee or qualified landscape architects in the detailed design of the M1, it is not surprising that commentators stressed that the first sections of the motorway lacked

the characteristics of a good modern motorway landscape. In *The landscape of roads* Sylvia Crowe compared the poor design of the M1 with the positive landscaping on the Ulm to Baden-Baden *Autobahn* in Germany (Figure 3). While the German motor road is seen to have a 'fluid plasticity', 'smooth transition between road and countryside' and landforms which are shaped and related to the surrounding landscape, the M1 is held to be afflicted by harsh, angular lines and landforms that act as a 'jarring element', divorcing the road from the landscape.[74] Flow and movement emerge as positive aspects of the aesthetics of landscape, which Crowe and others contrast with the negative interruptions, disruptions and angular jarring effects of a poorly designed motorway. The routing of the M1 through the 'Midlands Plain' had made it likely that it would interrupt the 'intricate and flowing landscape' of the area, but Crowe stressed that many of the disruptive forms and features of the motorway *could* have been avoided with appropriate landscaping.[75]

In 'The London–Birmingham motorway: a new look at the English landscape', which appeared in the *Geographical magazine* in October 1959, Brenda Colvin criticized the 'hard sharp lines and clumsy angles' of the motorway embankments, before focusing on Sir Owen Williams and Partners' distinctive standardized, concrete two-span overbridges (Figure 4), which 'seem very heavy in design':

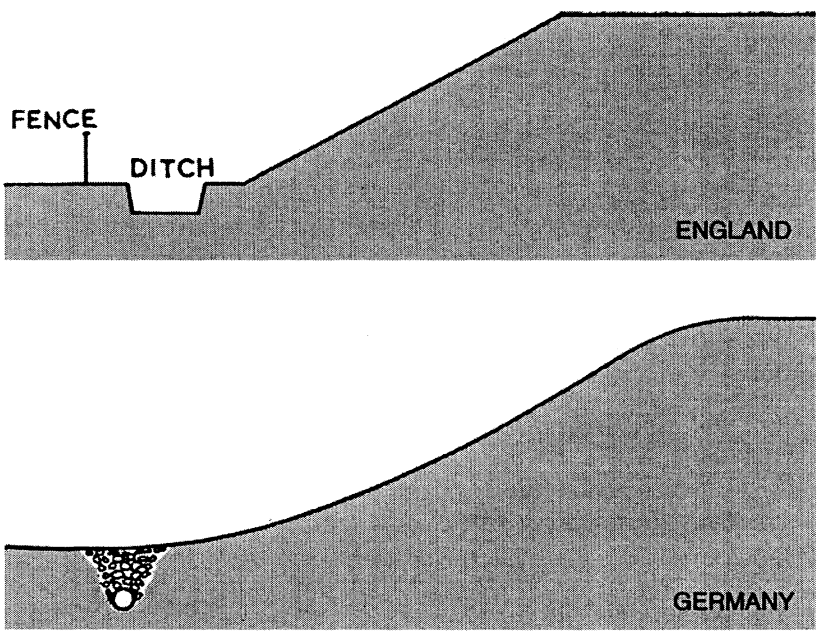

FIGURE 3 Motorway embankments in England and Germany. Sketch by John Brookes in Sylvia Crowe's *The landscape of roads*. (Reproduced by permission of Emap Construct, *The Architectural Press* (an imprint of Elsevier) and John Brookes.)

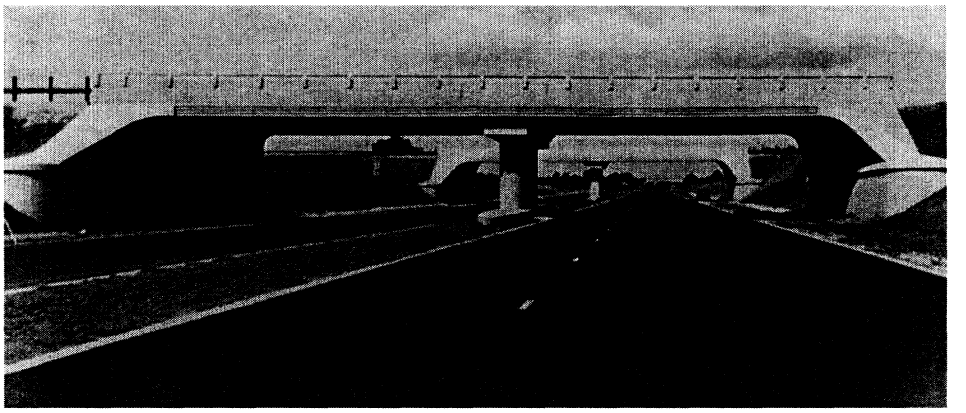

FIGURE 4 M1 motorway bridges designed by Sir Owen Williams and Partners. (Reproduced by permission of Laing O'Rourke Plc.)

> The central supporting pillar spoils the flow of open view under the arch, and the solid concrete parapet increases the apparent depth of the arch and the sense of its weight to an extent which is all the more oppressive because so frequent.[76]

At a time when many engineers were designing light, unobtrusive, clean-lined pre-stressed concrete bridges – with open metal rails replacing a solid parapet – Sir Owen's reinforced concrete over-bridges were criticized by a broad array of architects, engineers, and landscape architects. The central supporting columns, solid parapets and reinforced concrete design had been adopted for reasons of cost and speed of construction, and Sir Owen defended their design by stating that 'they have a shape that will always be remembered',[77] and that they were characteristic of the modern era: 'in the design of the structures ... regard had been paid to the spirit of the age, to the genius of the age. They were in a bold, massive manner.'[78] In his presidential address to the Royal Institute of British Architects in November 1959, Basil Spence – a member of the Bridges Committee of the Royal Fine Art Commission and the architect of Coventry Cathedral – explained how the 'breadth and strength' of the bridges reminded him 'of some of the great Roman works'.[79] Few architectural commentators repeated his praises.

Sylvia Crowe suggested that the bridges were rather 'static' when compared with the light *Autobahn* bridges, appearing as 'rough knots' in the landscape, and providing 'a visual check' on the sense of flow in the landscape.[80] This need for movement and continuity was seen to work in several directions, and Crowe argued that Sir Owen's bridges impeded the flow of the landscape both *along* and *across* the motorway:

> they divided the landscape between one side of the road and the other and gave the impression that they were impeding the passage of traffic ...[81]

Members of the Landscape Advisory Committee expressed concern 'at the heavy appearance of the bridges' after a visit to the motorway in May 1959,[82] while Brenda Colvin's replacement on the Committee, President of the ILA James Adams, was critical

of the 'brutal bridges in careless contexts'.[83] Alan Harris criticized the 'surpassing ugliness' of the over-bridges,[84] and Ian Nairn – author of *Outrage* and assistant editor of the *Architectural review* – criticized the bulk and mass of the bridges in a reference to 'Sir Owen Williams's deplorable attempts to outdo Vanbrugh'.[85] An array of other commentators renowned for their quite different attitudes to modern architecture also voiced criticisms of the bridges. Reyner Banham, the architecture and design critic who detailed the rise of New Brutalist architecture in 1950s Britain, was especially hostile to the design of Sir Owen's 'coarse, cheap bridges' which announced 'the ugliest piece of motor road in the world'.[86] Sir Owen Williams had designed some of Britain's most celebrated modernist structures of the interwar years – including the Boots 'wets' factory at Beeston, Nottingham – but while he was 'one of the white hopes' of the British Modern Movement in the 1930s, Banham felt that his postwar constructions had been a great disappointment to a new generation of British architects and critics (notably the Brutalists).[87] His prewar functional structures, 'unsullied by aesthetic intentions', had been displaced by a 'deliberately *anti*-aesthetic' approach in his post-war motorway work.[88]

Writing from a very different critical position in his 'Men and buildings' column in the *Daily Telegraph*, the poet, conservationist and architectural commentator John Betjeman referred to the landscaping and bridges on the M1 as 'matters of lasting regret'.[89] Betjeman's rival broadcaster, guidebook writer and architectural commentator Nikolaus Pevsner, added to the barrage of critical writings and reviews in introductions to his guides to Northamptonshire and Buckinghamshire in the *Buildings of England* series:

> Sir Owen Williams evidently wanted to impress permanence on us, and permanence is a doubtful quality in devices connected with vehicles and means of transport. Elegance, lightness, and resilience might have been preferable ... On the motorway elegance was arrived at only in the foot-bridges. Even retaining walls, revetments, etc., are of concrete blocks. ... So the Motorway is MODERN ARCHITECTURE only with reservations.[90]

As the bridges were some of the only 20th-century modernist structures in the Northamptonshire guide, Pevsner was concerned that they might be seen to be typical of the capitalized category/style 'MODERN ARCHITECTURE'. Pevsner, like Banham, Crowe, Colvin, Jellicoe and Nairn, was quite clear that modern architecture and modern bridges could be attractive and well-designed, but their design must reflect an appropriate, contemporary, functional modernism, and their form and presence must not impede the movement and flow of the landscape.

Landscape architects could do little about the design of the bridges, but they did suggest techniques for integrating the motorway's structures into their surroundings and maintaining the visual flow of the landscape. Sylvia Crowe explained how 'the functional use of planting [could] produce the link between the landscape of speed and the landscape of nature', and how 'massed planting' could improve 'the bad shape of the banks and the appearance of the bridges'.[91] Functional planting could help unify the motorway and the landscape, reinstating a sense of flow and guiding the driver's vision in an appropriate manner. Planting could screen unsightly views and help

prevent monotony and boredom, but Brenda Colvin stressed that without the influence of the Landscape Advisory Committee and Royal Fine Art Commission the M1 may have 'had a ribbon of Forsythia and other garden shrubs on the central reserve... and subtopian decoration on side reserves and embankments'.[92] Colvin and other members of the Landscape Advisory Committee had been highly critical of the planting proposals prepared by the landscape consultants employed by Sir Owen Williams and Partners. Mr Long's first landscape report included species of tree and shrub which the Landscape Advisory Committee deemed to be too fussy, ornamental, colourful and urban for a modern rural motorway.[93] At a meeting of the Committee in July 1957, Sir Eric Savill questioned proposals to plant Forsythia and Pyracantha, while Sir David Bowes-Lyon and the whole committee 'agreed that flowering plants of a semi-garden character were misplaced in real countryside'. Sir Ralph Clarke of the Royal Forestry Society for England and Wales voiced concerns over proposals to plant Austrian pines, as 'less ugly conifers [are] available', while copper beech, purple sycamore and whitebeam were thought unsuitable as 'the Committee did not favour colour variations in foliage other than shades of green'.[94] Mr Long revised the planting schedules, which were rejected again in January 1958. The Committee urged the consultants to simplify their proposals, avoid ornamental species of tree and shrub, focus on indigenous trees, pay attention to the speed and experiences of motorists and submit detailed illustrated planting plans rather than lists of species.[95] Visits to the construction site in June 1958 and May 1959 confirmed the Committee's view that simple, large-scale massed plantings would be essential on such a vast and fast motorway. As Clough Williams-Ellis stated after the visit in May 1959:

> Traversing the actual carriageway one realized more vividly than ever the immense size... It so far transcends the hitherto generally accepted human scale as actually also to dwarf nature itself... there is a danger that any landscaping effects may merely produce a niggling and irritating triviality.[96]

The consultants' modified and simplified planting plans were finally accepted by the Landscape Advisory Committee in October 1959, and 72 050 trees and 4 700 shrubs were planted in the winter of 1959-60. Twenty-five species of tree and ten of shrub were used, although 81 per cent of the trees were of just five common, long-established species: alder (10 000), ash (11 000), common oak (20 000), Scots pine (10 000) and Spanish chestnut (7 600).[97] The Landscape Advisory Committee felt it had succeeded in preventing Sir Owen's landscape consultants from urbanizing or suburbanizing the motorway with detailed ornamental species that would interrupt the flow of the landscape and distract drivers, but disagreements soon emerged over another issue: the design and landscaping of the first two service areas at Newport Pagnell and Watford Gap.

Sir Owen Williams and Partners were responsible for locating, landscaping and coordinating the design of the service areas, but separate architects were charged with designing the maintenance compounds, police posts and main buildings for the operators. The Royal Fine Art Commission and Landscape Advisory Committee complained about the lack of design coordination and the rather piecemeal fashion in which plans were being submitted for approval.[98] The Landscape Advisory

Committee were 'not very satisfied' with the layout proposed for Watford Gap service area,[99] and the CPRE's representative, George Langley-Taylor, expressed concern at the 'lack of cohesion between the different aspects' of the sites, and the use of flat roofs on buildings.[100] As he stated in a letter to the Ministry about the design of the Watford Gap police post:

> I find it difficult to comment because I fear that my objection to the long flat roof may be interpreted as an objection to modern architecture. Frankly I do not like it because I feel however right it might be as a modern building this long straight line is bound to be a jar on the landscape and I feel most strongly that in dealing with our motorways we should try to achieve a sympathy with the landscape and avoid introducing any 'shock' in our designs.[101]

Sir David Bowes-Lyon agreed, stating that pitched roofs may 'help break up the straight lines of the buildings', while Clough Williams-Ellis also disliked the designs, adding that they 'were a fair sample of the modern trend in architecture'.[102] The flat roofs remained in the plans, and architectural critics agreed that both service areas contained average modern buildings which would not enhance the English countryside. The *Architects' journal* referred to the 'commonplace design' of Watford Gap service area, which 'does not augur well for future motorways',[103] while in the *Architectural review* Raymond Spurrier criticized Newport Pagnell services for its 'nondescript buildings and irresolute planning' which had the 'usual subtopian results'.[104] The service area had brought subtopia to rural Buckinghamshire, and the Landscape Advisory Committee felt that Sir Owen Williams and Partners' planting proposals were unlikely to improve the situation.

At a meeting of the Landscape Advisory Committee in February 1958, Dr George Taylor expressed concern that Mr Long had 'injected "urbanization" into his proposals for service stations',[105] and this was confirmed in July 1959 when a member of Sir Owen's staff wrote to the Ministry to outline their principle of treating the 'interior of Service Areas as partly urbanised'.[106] In the earliest proposals for planting Watford Gap service area, Mr Long proposed that the parking areas be separated by green spaces that were 'informal and more of the nature of a park'.[107] The exterior of the area would be planted with limes, while it was suggested that flowering shrubs should adorn the interior along with 'more unusual trees' such as tulip tree, maidenhair tree and wellingtonia.[108] As Newport Pagnell service area was intended to serve lorry drivers, Mr Long prepared a planting scheme which would reflect the tastes and temperaments of the largely working-class, male commercial drivers. The central areas would be planted with laburnum or thorn, which would be 'in keeping with the necessity for attracting and pleasing the average lorry driver who would perhaps be more stimulated by a mixture of this nature than with the commoner ash/elm mixtures'.[109] Stimulation and excitement were not the emotions the Landscape Advisory Committee wished to be associated with the landscapes of service areas. At a meeting in July 1960, Committee members expressed concern that ornamental trees and shrubs such as magnolia, liquidambar, rhododendron, viburnum and fuchsia Ricartonii might excite rather than relax drivers, and that the colours of detailed 'flowering shrubs ... may clash with that of the petrol pumps'.[110] Sir Owen's landscape consultants had treated the service areas

as semi-urbanized 'island sites', separated from the motorway *and* from the surrounding countryside,[111] but the Landscape Advisory Committee emphasized that they must be treated as if they are part of the motorway, with large-scale indigenous trees to break up the lines of the modern buildings.[112] While motorway service areas are traversed at very low speeds compared with the motorway proper, visual detail and clutter would still detract from their function as spaces of relaxation, revitalization, and flow.

Sir Owen Williams and Partners did not repeat their bridge designs on the northerly stretches of the M1 between Crick and Doncaster, and landscape architects and aesthetic commentators provided more favourable responses to later sections of motorway. In the *Architectural review* in 1975, Ian Nairn outlined the changes which had occurred to the landscape between Southampton and Carlisle in the 20 years since he had written *Outrage*. Motorways had been the 'only drastic change' to affect the route he had surveyed in 1955, and while creating a less visually aware, automatized 'motorway person', they were largely free from the subtopian clutter that adorned suburban roads:

> the motorway design and landscaping – after we got over the M1 – is one of the few genuinely collective and genuinely hopeful parts of design in Britain. In vacuo, of course. And the motorway verges, sealed off from us pygmies, become nature reserves. Oh children.[113]

The poor landscaping and architecture on the M1 may have halted the flow of the surrounding landscape, but plant seeds evidently did flow through the landscapes of the motorway. While 35 species of tree and shrub were planted on the original sections of the motorway in 1959-60, Dr J. Michael Way's botanical survey of the 184 miles of M1 between London and Leeds for the Nature Conservancy in 1970 recorded 384 species of vegetation.[114] As the Landscape Advisory Committee recognized, motorway landscapes would and did change over time, as did attitudes to the value of *both* the landscapes and architecture of the motorway. During the 1970s, scientists such as Dr Way paid increasing attention to the ecological value of motorway verges,[115] while in 1992 Andrew Saint suggested that Sir Owen's M1 bridges formed 'an important part of our heritage', and might be a target for preservation under English Heritage's postwar listing programme.[116] While more critical attitudes to road building, driving and the environment were emerging during the 1970s, 1980s and 1990s, some felt that the landscapes of the M1 had aged and improved.

Conclusions

> The great majority of people see the country mostly from roads, railways and footpaths. These points of view are those of the population in general, and should be regarded as being of national concern.[117]

During the Second World War and early postwar years, prominent figures in the Institute of Landscape Architects attempted to cultivate a role for members of their profession in reconstructing and shaping Britain's landscapes. It was argued that landscape architects, along with engineers, planners and architects, must account for

the diverse ways in which people encounter Britain's landscapes, and Brenda Colvin, for one, was quite clear that the majority of the population experienced the nation's landscapes when in movement. Colvin, Crowe and Jellicoe positioned the mobile gaze of the driver at the core of their writings on the landscaping of Britain's roads and motorways; but while one could position their interventions in a diverse and extended history of artistic explorations into the embodied movements and gaze of travellers, it is important to recognize the quite distinct reasons why landscape architects attempted to account for the movements and speed of motorists. Painters, photographers and writers have often attempted to represent, capture or expose the dynamism of the driver's view of the landscape through the use of striking aesthetic techniques, but landscape architects stressed that it was the task of engineers and landscape designers to understand the driver's mobile gaze in order to design roads which were *not striking* and would *not distract* drivers attention from the events unfolding on the road. Roadside planting and landscaping must reflect functional, modern principles – of simplicity, unobtrusiveness and a sense of visual flow – and the landscape architect must adopt techniques for maintaining the orderly movements of drivers: planting to improve safety, guide the attention of motorists, screen unsightly views, prevent boredom, reduce dazzle and enliven the scene.

The first sections of the M1 motorway were criticized for failing to adopt a contemporary, modernist design aesthetic that was appropriate to a high-speed motorway. The solid, seemingly 'heavy' bridges and angular landforms were seen to interrupt the flow of the landscape both along and across the road, and Colvin, Crowe and Jellicoe all suggested that British engineers could have drawn important lessons from the design and landscaping of motorways in Germany and the USA. British landscape architects and preservationists had been admiring German and American motor roads since the early 1930s.[118] Colvin had toured the Westchester Parkway on a visit to the USA in 1932, and Crowe visited the Connecticut Turnpike, Merritt Parkway and the roads of the Tennessee Valley Authority in the 1950s.[119] It was suggested that the modernism of Britain's new motorways could have benefited from an appreciation of the modern designs adopted in these and other countries, but Colvin, Crowe and Jellicoe also argued that the distinctiveness and diversity of the British landscape would necessitate the formulation of a British modernism on its motorways, with the incorporation and sensitive reworking of modernist aesthetic principles in particular regional and local settings. Crowe and Jellicoe stressed that this would require landscape architects to develop an appreciation of earlier English landscape and artistic traditions which had acquired an understanding of the mobile perspective of the traveller. Different ways of moving, at different speeds, would engender different ways of seeing and being in the landscape; but while established modes of travel might indicate effective landscaping and compositional techniques, the landscape architect must establish a modern road style appropriate for high-speed motorway driving.

Landscape architects attempted to shape and govern the experiences of motorists, but their landscape designs were merely one set of formulations that were intended to shape and influence the embodied experiences of drivers.[120] Guidebooks such as Margaret Baker's *Discovering M1*, 'written for passengers – perhaps bored by the

apparent monotony of a road devoid of strip development and place-name signs' and 'arranged for easy assimilation at 60mph', were also intended to inculcate new ways of seeing and being in the landscape.[121] The Highway Code, driving manuals, automotive accessories, the Institute of Advanced Motorists' training courses and newly designed motorway signs were also formulated with the intention of shaping the visual perception, as well as enhancing the performance, capacities and dispositions, of motorway vehicle drivers.

The writings of landscape architects such as Colvin, Crowe and Jellicoe – along with the work of artists, engineers, film-makers and writers who have operated with the concept of landscape – can alert us to the rich history of sensibilities to movement in and through the landscape. While these engagements may lack some of the theoretical cogency or complexity of academic attempts to develop more performative, practice-oriented or non-representational accounts of pre-cognitive action and movements in the landscape, they reveal how practitioners and artists have attempted to negotiate a similar terrain to theorists of practice, by accounting for the dynamism and embodied engagements of people moving through the landscape. These artists and practitioners may frequently try to frame, fix or represent these dynamic movements through the landscape; but we can see their aesthetic engagements and closures as reflecting their excitement and emotion of being caught up in the midst of things, in the flow of life, in the production and ordering of landscapes.[122]

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Notes

[1] R. Banham, 'New way north', *New society* **20** (1972), p. 243.

[2] *Ibid.*

[3] *Ibid.* There is also, of course, an important difference between the viewpoints and embodied engagements of drivers and passengers, and of passengers in the front and the rear.

[4] Recent texts which have sparked debates include: W. Schivelbusch, *The railway journey: trains and travel in the 19th century* (Oxford, Blackwell, 1980); S. Kern, *The culture of time and space 1880-1918* (Cambridge, MA, Harvard University Press, 1983); J. Urry, *The tourist gaze* (London, Sage, 1990); J. Crary, *Techniques of the observer* (Cambridge, MA, MIT Press, 1990); M. Jay, *Downcast eyes* (Berkeley, University of California Press, 1993). On vision and travel by car and train see e.g. S. Daniels, 'Images of the railway in nineteenth century paintings and prints', in Nottingham Castle Museum, *Train spotting: images of the railway in*

art (Nottingham, Nottingham Castle Museum, 1985), pp. 5–19; W. Sachs, *For love of the automobile* (Oxford, University of California Press, 1992); N. Thrift, *Spatial formations* (London, Sage, 1996); M. Liniado, *Car culture and countryside change* (Cirencester, National Trust, 1996); M. Featherstone, 'The *flâneur*, the city and virtual public life', *Urban studies* **35** (1998), pp. 909–25; J.T. Schnapp, 'Crash (speed as engine of inviduation)', *Modernism/ modernity* **6** (1999), pp. 1–49; J. Urry, *Sociology beyond societies* (London, Routledge, 2000); M. Crang, 'Rethinking the observer: film, mobility, and the construction of the subject', in T. Cresswell and D. Dixon, eds, *Engaging film: geographies of mobility and identity* (London, Rowman & Littlefield, 2002), pp. 13–31; J. Larsen, 'Tourism mobilities and the travel glance: experiences of being on the move', *Scandinavian journal of hospitality and tourism* **1** (2001), pp. 80–98.

[5] Recent geographical discussions of the performative and non-representational dimensions of landscape and architecture include: T. Cresswell, 'Landscape and the obliteration of practice', in K. Anderson, M. Domosh, S. Pile and N. Thrift, eds, *Handbook of cultural geography* (London, Sage, 2002), pp. 269–81; S. Hinchliffe, '"Inhabiting" – landscapes and natures', in Anderson *et al.*, *Handbook of cultural geography*, pp. 207–25; M. Rose, 'Landscapes and labyrinths', *Geoforum* **33** (2002), pp. 455–67; J. Wylie, 'An essay on ascending Glastonbury Tor', *Geoforum* **33** (2002), pp. 441–54; L. Lees, 'Towards a critical geography of architecture: the case of an Ersatz colosseum', *Ecumene* **8** (2001), pp. 51–86; P. Merriman, '"Operation motorway": landscapes of construction on England's M1 motorway', *Journal of historical geography* **31** (2005), pp. 113–33; P. Cloke and O. Jones, 'Dwelling, place and landscape: an orchard in Somerset', *Environment and planning A* **33** (2001), pp. 649–66. On non-representational theories, see Thrift, *Spatial formations*. An engagement with non-representational theories has already led geographers to trace the embodied practices and performances of dancers, musicians and performances artists; see e.g. N. Thrift, 'The still point: resistance, expressive embodiment and dance', in S. Pile and M. Keith, eds, *Geographies of resistance* (London, Routledge, 1997), pp. 124–51; N. Thrift and J.-D. Dewsbury, 'Dead geographies – and how to make them live', *Environment and planning D: society and space* **18** (2000), pp. 411–32; D.P. McCormack, 'A paper with an interest in rhythm', *Geoforum* **33** (2002), pp. 469–85; D.P. McCormack, 'Drawing out the lines of the event', *Cultural geographies* **11** (2004), pp. 211–20; cf. C. Nash, 'Performativity in practice: some recent work in cultural geography', *Progress in human geography* **24** (2000), pp. 653–64. Drawing upon phenomenology, anthropologists have been arguing for a focus on movement in the landscape for some time; see e.g. T. Ingold, 'The temporality of landscape', *World archaeology* **25** (1993), pp. 152–74; E. Hirsch, 'Landscape: between space and place', in E. Hirsch and M. O'Hanlon, eds, *The anthropology of landscape* (Oxford, Oxford University Press, 1995), pp. 1–30, C. Tilley, *A phenomenology of landscape* (Oxford, Berg, 1994); B. Bender, 'Introduction', in B. Bender and M. Winer, eds, *Contested landscapes: movement, exile and place* (Oxford, Berg, 2001), pp. 1–18; B. Bender, *Stonehenge: making space* (Oxford, Berg, 1998). American architect Stan Allen uses the term 'infrastructural urbanism' to describe recent attempts to 'move away from the representational imperatives' of modernist and postmodernist architecture. Infrastructural urbanism focuses on issues of 'material practice' and 'performance': it is 'less concerned with what things look like and more concerned with what they can do'. See S. Allen, *Points + lines: diagrams and projects for the city* (New York, Princeton Architectural Press, 1999), pp. 52, 53.

[6] Cresswell, 'Landscape and the obliteration of practice', p. 280.

[7] Nash, 'Performativity in practice'.

[8] J.B. Jackson, 'The abstract world of the hot-rodder', in J.B. Jackson, *Landscape in sight: looking at America*, ed. H. Lefkowitz Horowitz (London, Yale University Press, 1997), pp. 206–7; see also J.B. Jackson, *Discovering the vernacular landscape* (London, Yale University Press, 1984); J.B. Jackson, *A sense of place, a sense of time* (London, Yale University Press, 1994). Jackson's writings were a key source of inspiration for Robert Venturi, Denise Scott Brown and Steven Izenour's *Learning from Las Vegas* (London, MIT Press, 1972), an architectural study of the Las Vegas strip. See D. Scott Brown, 'Learning from Brinck', in C. Wilson and P. Groth, eds, *Everyday America: cultural landscape studies after J.B. Jackson* (London, University of California Press, 2003), pp. 49–61.

[9] Cresswell, 'Landscape and the obliteration of practice', p. 271. On J.B. Jackson, see also D.W. Meinig, 'Reading the landscape: an appreciation of W.G. Hoskins and J.B. Jackson', in D.W. Meinig, ed., *The interpretation of ordinary landscapes* (Oxford, Oxford University Press, 1979), pp. 195–244; H. Lefkowitz Horowitz, 'J.B. Jackson and the discovery of the American landscape', in Jackson, *Landscape in sight*, pp. ix–xxxiv; *Geographical review*, 'Special issue on J.B. Jackson and geography', **88** (1998), pp. 465–579.

[10] D. Appleyard, K. Lynch and J.R. Myer, *The view from the road* (Cambridge, MA, MIT Press, 1964), p. 3. Their work has been criticized for universalizing the experience of movement and focusing on cognitive aspects of vision – overlooking the habitual and pre-cognitive aspects of driving. See M. Conan, 'Introduction: garden and landscape design, from emotion to the construction of self', in M. Conan, ed., *Landscape design and the experience of motion* (Washington, DC, Dumbarton Oaks Research Library and Collection, 2003), pp. 1–33. A contrasting example is the work of the French landscape designer Bernard Lassus, whose writings and designs were influenced by the writings of Maurice Merleau-Ponty. Lassus served as a landscape consultant to the French Ministry of Transport. See M. Conan, 'The quarries of Crazannes: Bernard Lassus's landscape approach to diversity', *Studies in the history of gardens and designed landscapes* **23** (2003), pp. 347–65; C. Leyrit and B. Lassus, *Autoroute et paysage* (Paris, Éditions du Demi-Cercle, 1994); B. Lassus, *The landscape approach* (Philadelphia, University of Pennsylvania Press, 1998).

[11] L. Halprin, *Freeways* (New York, Reinhold, 1966).

[12] S. Daniels, 'On the road with Humphry Repton', *Journal of garden history* **16** (1996), p. 179; S. Daniels, *Humphry Repton: landscape gardening and the geography of Georgian England* (London, Yale University Press, 1999).

[13] Artists and photographers who have developed novel techniques for representing movement and travel include J.M.W. Turner, the Italian Futurists and Laszlo Moholy-Nagy (to name just three, quite different, examples). On vision and mobility in photography, film and art, see e.g. P.D. Osborne, *Travelling light: photography, travel and visual culture* (Manchester, Manchester University Press, 2000); Crang, 'Rethinking the observer'; British Council, *Landscape* (London, British Council, 2000).

[14] A. Gallagher, 'Landscape', in British Council, *Landscape*, p. 8.

[15] Historical studies of the work of architects and planners in postwar reconstruction include: N. Bullock, *Building the post-war world: modern architecture and reconstruction in Britain* (London, Routledge, 2002); R. Elwall, *Building a better tomorrow: architecture in Britain in the 1950s* (Chichester, Wiley-Academy, 2000); J.R. Gold, *The experience of modernism: modern architects and the future city 1928-1953* (London, Spon, 1997); D. Matless, *Landscape and Englishness* (London, Reaktion, 1998); J.B. Cullingworth, *Environmental planning, 1939-1969. Volume 1: reconstruction and land use planning, 1939-1947* (London, HMSO, 1975); D. Hardy, *From new towns to green politics: campaigning for town and country planning, 1946-1990* (London, Spon, 1991).

[16] On the landscaping of the German Autobahnen and American parkways and freeways, see T. Zeller, '"The landscape crown": landscape, perceptions, and modernizing effects of the German *autobahn* system, 1934 to 1941', in D.E. Nye, ed., *Technologies of landscape: from reaping to recycling* (Amherst, University of Massachusetts Press, 1999), pp. 218–38; W.H. Rollins, 'Whose landscape? Technology, Fascism, and environmentalism on the National Socialist *Autobahn*', *Annals of the Association of American Geographers* **85** (1995), pp. 494–520; E. Dimendberg, 'The will to motorization: cinema, highways, and modernity', *October* **73** (1995), pp. 91–137; G. Gröning, 'The feeling of landscape – a German example', *Landscape research* **17** (1992), pp. 108–15; J.D. Shand, 'The Reichsautobahn: symbol for the Third Reich', *Journal of contemporary history* **19** (1984), pp. 189–200; Sachs, *For love of the automobile*; I. Boyd Whyte, 'National socialism and modernism', in D. Britt, ed., *Art and power: Europe under the dictators 1930-45* (London, Hayward Gallery, 1995), pp. 258–69; A. Wilson, *The culture of nature: North American landscapes from Disney to the Exxon Valdez* (Oxford, Blackwell, 1992); M. Gandy, *Concrete and clay: reworking nature in New York City* (London, MIT Press, 2002).

[17] While there are no book-length studies of the role of landscape architects in the reconstruction of postwar Britain, see T. Aldous and B. Clouston, *Landscape by design* (London, Heinemann, 1979), esp. pp. 46–52 on roads; G.A. Jellicoe, 'War and peace', *Landscape design* **125** (1979), p. 10; L.J. Fricker, 'Forty years a growing', *Journal of the Institute of Landscape Architects* **86** (1969), pp. 8–15; S. Harvey and S. Rettig, eds, *Fifty years of landscape design 1934-84* (London, Landscape Press, 1985), esp. pp. 125–40 on roads; S. Harvey, ed., *Reflections on landscape: the lives and works of six landscape architects* (Aldershot, Gower Technical Press, 1987); A. Powers, 'Landscape in Britain', in M. Treib, ed., *The architecture of landscape* (Philadelphia, University of Pennsylvania Press, 2002), pp. 56–81.

[18] On the design, construction and use of the M1 motorway in early postwar Britain, see P. Merriman, *Driving spaces* (Oxford, Blackwell, forthcoming); P. Merriman, '"A power for good or evil": geographies of the M1 in late fifties Britain', in D. Gilbert, D. Matless and B. Short, eds, *Geographies of British modernity* (Oxford, Blackwell, 2003), pp. 115–31; Merriman, 'Operation motorway'; P. Merriman, 'Driving places: Marc Augé, non-places and the geographies of England's M1 motorway', *Theory, culture, and society* **21** (2004), pp. 145–67; P. Merriman, '*M1: a cultural geography of an English motorway, 1946-1965*' (PhD thesis, University of Nottingham, 2001). See also R.J. Williams, 'Pleasure and the motorway', in P. Wollen and J. Kerr, eds, *Autopia: cars and culture* (London, Reaktion, 2002), pp. 281–87. For an overview of Britain's motorway programme, see G. Charlesworth, *A history of British motorways* (London, Thomas Telford, 1984).

[19] B. Colvin, 'Presidential address', *Journal of the Institute of Landscape Architects* **22** (1951), p. 4.

[20] G.A. Jellicoe, 'The wartime journal of the Institute of Landscape Architects', in Harvey and Rettig, *Fifty years*, p. 9. In 1947 there were 170 members of the ILA, with 65 being categorized as horticulturists and 81 as architects or town planners. See Fricker, 'Forty years'.

[21] Lady Allen of Hurtwood, in: 'A review of policy', *Wartime journal of the Institute of Landscape Architects* **3** (1943), p. 5.

[22] Matless, *Landscape and Englishness*, p. 223.

[23] See H.F. Clark, 'Landscape architecture in the Festival of Britain', *Journal of the Institute of Landscape Architects* **21** (1951), pp. 2–4; D. Scott, 'New towns', in G. Collens and W. Powell, eds, *LDT monographs no. 2: Sylvia Crowe* (Reigate, Landscape Design Trust, 1999), pp. 47–67.

[24] *Parliamentary debates*, *House of Commons*, 'Highway development (government programme)', **422** (1946), 6 May, cols. 590–95.

[25] Brenda Colvin was the first female president of the ILA. See S. Harvey, 'Brenda Colvin (1897-1981)', in Harvey, *Reflections*, pp. 139–50; Colvin, 'Presidential address'; B. Colvin, 'Beginnings', *Landscape design* **125** (1979), p. 8; M. Laurie, 'Women of substance', *Landscape design* **278** (1999), pp. 53–56; Aldous and Clouston, *Landscape by design*.

[26] B. Colvin, 'Roadside planting in country districts', *Landscape and garden* **6** (1939), p. 86.

[27] The Roads Beautifying Association was formed by Dr Wilfrid Fox following discussions with Minister of Transport Wilfrid Ashley. Fox was consulting physician for skin diseases at St George's Hospital, London, and an amateur horticulturist and arboriculturist who established Winkworth Arboretum in Surrey. On the history of the RBA, see E. Ford, 'Byways revisited', *Landscape design* **234** (1994), pp. 34–38; Merriman, *'M1'*. The RBA were paid to act as official advisers to the Ministry of Transport between 1938 and 1947, and 1954 and 1956. See The National Archives of the UK (TNA), PRO MT 121/73, Letter from P. Faulkner to W. Fox, 12 May 1947; TNA PRO MT 121/575, Letter from A. Lennox-Boyd to W. Fox, 28 July 1954.

[28] Colvin, 'Roadside planting'; B. Colvin, *Land and landscape* (London, John Murray, 1948).

[29] The Roads Beautifying Association, *Seventh report of the Roads Beautifying Association October, 1933-March, 1935* (London, Roads Beautifying Association, 1935), p. 15.

[30] W. Fox, 'Roadside planting (including post-war suggestions)', *Journal of the Royal Horticultural Society* **69** (1944), p. 231.

[31] Colvin, 'Roadside planting', p. 88.

[32] Colvin, *Land and landscape*, p. 244.

[33] *Ibid*., pp. 245, 247. On the American concept of 'the fitted highway', see F.W. Cron, 'The art of fitting the highway to the landscape', in W. Brewster Snow, ed., *The highway and the landscape* (New Brunswick, NJ, Rutgers University Press, 1959), pp. 78–109.

[34] Colvin, *Land and landscape*, p. 246.

[35] *Ibid*., p. 249.

[36] *Ibid*., p. 248.

[37] S. Crowe, *The landscape of roads* (London, Architectural Press, 1960).

[38] I. Nairn, 'Outrage', *Architectural review (special number)* **117** (1955), pp. 363–460; cf. S. Crowe, *Tomorrow's landscape* (London, Architectural Press, 1956); S. Crowe, *The landscape of power* (London, Architectural Press, 1958); Crowe, *The landscape of roads*; Collens and Powell, *Sylvia Crowe*. Of course, Nairn published his own positive response to 'Outrage' in: 'Counter-attack', *Architectural review (special number)* **120** (1956), pp. 353–440.

[39] E. de Maré, 'Notes on books: to-morrow's landscape. By Sylvia Crowe', *Journal of the Royal Society of Arts* **105** (1956), p. 121.

[40] Crowe, *Tomorrow's landscape*, p. 15.

[41] Crowe, *The landscape of roads*, p. 13.

[42] *Ibid*., p. 34.

[43] *Ibid*., pp. 33–34.

[44] *Ibid*., p. 34.

[45] G.A. Jellicoe, 'Motorways: their landscaping, design and appearance', *Journal of the Town Planning Institute* **44** (1958), pp. 274–83; a version was reprinted in G.A. Jellicoe, *Studies in landscape design* (London, Oxford University Press, 1960). Jellicoe's paper was one of only 15 references in the bibliography of Crowe's *The landscape of roads*.

[46] Jellicoe, 'Motorways', pp. 275, 276. Crowe's discussion of links between English landscape traditions and Chinese philosophies of landscape and nature may well have emerged from her reading of Jellicoe's paper.

[47] *Ibid.*, p. 276.

[48] Daniels, 'On the road'.

[49] Jellicoe, 'Motorways', p. 276.

[50] *Ibid. The shadowed road* is usually titled *Landscape with cottages*.

[51] R. Spurrier, 'Caution – road works', *Architectural review* **125** (1959), p. 242.

[52] Crowe, *Tomorrow's landscape*; Crowe, *The landscape of roads*.

[53] Jellicoe, 'Motorways', p. 280.

[54] Spurrier, 'Caution', p. 244.

[55] On the life and work of Jellicoe, see M. Spens, *Gardens of the mind: the genius of Geoffrey Jellicoe* (Woodbridge, Antique Collectors' Club, 1992); M. Spens, *The complete landscape designs and gardens of Geoffrey Jellicoe* (London, Thames & Hudson, 1994); S. Harvey, ed., *LDT monographs no. 1: Geoffrey Jellicoe* (Reigate, Landscape Design Trust, 1998); G.A. Jellicoe, 'Sir Geoffrey Jellicoe', in Harvey, *Reflections on landscape*, pp. 1–29.

[56] On the interweaving of picturesque theories with modernist planning and architecture see, e.g. N. Pevsner, *Studies in art, architecture and design, volume 1: From Mannerism to Romanticism* (London, Thames & Hudson, 1968); N. Pevsner, *The Englishness of English art* (London, Architectural Press, 1956); I. de Wolfe (pseudonym of Hubert de Chronin Hastings, owner of *the Architectural review*), 'Townscape', *Architectural review* **106** (1949), pp. 354–62; R. Banham, 'Revenge of the picturesque: English architectural polemics, 1945-1965', in J. Summerson, ed., *Concerning architecture* (Harmondsworth, Allen Lane The Penguin Press, 1968), pp. 265–73; Bullock, *Building the post-war world*; Matless, *Landscape and Englishness*; D. Matless, 'Topographic culture: Nikolaus Pevsner and the buildings of England', *History workshop journal* **54** (2002), pp. 73–99; Powers, 'Landscape in Britain'.

[57] de Wolfe, 'Townscape'.

[58] *Ibid.*, p. 362.

[59] 'Foreword', *Architectural review* **110** (1951), p. 78.

[60] G. Cullen, 'Alphabet or image', *Architectural review* **120** (1956), p. 243.

[61] See B. Colvin, 'Introduction', in Association for Planning and Regional Reconstruction, *Trees for town and country* (London, Lund Humphries, 1947). The choice of trees was decided by the Association of Planning and Regional Reconstruction, the Royal Botanic Gardens at Kew, the Institute of Landscape Architects, and the Roads Beautifying Association.

[62] Institute of Landscape Architects, *Roads in the landscape: a report prepared by the ILA, 21 March 1946* (London, Institute of Landscape Architects, 1946).

[63] This was a joint committee whose main role was to prepare an illustrated version of the ILA's 1946 report for publication. See: Joint Committee including representatives of the Council for the Preservation of Rural England, the Institute of Landscape Architects, the Roads Beautifying Association, the Royal Forestry Society of England and Wales, and the Standing Joint Committee of the Royal Automobile Club, the Automobile Association and the Royal Scottish Automobile Club, *The landscape treatment of roads* (London, Council for the Preservation of Rural England, 1954). Wilfrid Fox represented the RBA on both the ILA and CPRE committees, but while he advanced his often controversial ideas on the planting of roads, they tended to be omitted from final reports.

[64] TNA PRO MT 121/74, 'Advisory Committee on the Landscape Treatment of Trunk Roads. Minutes of first meeting held in Room 6042, Berkeley Square House, at 2.30p.m. on 30 April 1956', 17 May 1956. On the Landscape Advisory Committee, see C. Williams-Ellis, *Roads in the landscape* (London, HMSO, 1967); B. de Hamel, *Roads and the environment* (London, HMSO, 1976).

[65] TNA PRO MT 121/81, Letter from W. Fox to Mr Watkinson, 6 Sept. 1956. Fox was replaced by the RBA's Madeleine Spitta, whose views were more in line with the rest of the Committee.

[66] Merriman, *Driving spaces*. On German landscaping policy, see Dimenberg, 'The will to motorization'; Shand, 'The Reichsautobahn'; Rollins, 'Whose landscape?'; Zeller, 'The landscape crown'; G. Gröning and J. Wolschke-Bulmahn, 'The native plant enthusiasm: ecological panacea or xenophobia?', *Landscape research* **28** (2003), pp. 75–88. Of course, there were a significant number of other British thinkers and organizations during the 1930s, 1940s and 1950s who *did* draw links between race, landscape, ecology, health and the nation. See Matless, *Landscape and Englishness*.

[67] Merriman, *Driving spaces*; Merriman, 'M1'. The first sections of the M1 that were opened on 2 Nov. 1959 were designed and built in two sections: the 55-mile-long London to Birmingham section of the London–Yorkshire motorway (stretching between Luton and Rugby and incorporating the M45), designed by Sir Owen Williams and Partners, and the 17-mile-long St Albans bypass motorway (stretching between Watford and Luton, and incorporating the M10), designed by Hertfordshire County Council.

[68] TNA PRO MT 121/576, Minute 15 by Mr Haynes, 23 Dec. 1954. See Merriman, 'A power for good or evil'.

[69] TNA PRO MT 121/577, Letter from Godfrey Samuel to Ministry of Transport and Civil Aviation, 20 Apr. 1956; TNA PRO MT 121/77, Minute 70 by L.S. Mills, 26 Nov. 1959.

[70] TNA PRO MT 121/77, 'Note of a meeting held on the 31st July to discuss the appointment of a landscape architect for the London-Yorkshire Motorway', 10 Aug. 1956.

[71] See: 'Motorways', *Journal of the Institute of Landscape Architects* **47** (1959), pp. 13–16; 'Relating the motorways to landscape: joint planning urged', *The Times* (15 Apr. 1959), p. 6; 'RIBA and motorways', *Architects' journal* **129** (1959), pp. 613–14; Royal Fine Art Commission, *Sixteenth report of the Royal Fine Art Commission, January 1958–August 1959* (Cmnd. 909) (London, HMSO, 1959); *Parliamentary debates, House of Lords*, 'Planning of motorways', **216** (7 May 1959), cols. 207–9; TNA PRO MT 121/77, 'Motorways: statement by the Royal Fine Art Commission', HT.33/2/06, 15 Apr. 1959. Mr A.P. Long was employed as Consultant on Forestry and Landscape and Mr Clay as a junior forestry officer. Long was President of the Society of Foresters of Great Britain, a retired Director of Forestry for Wales, and former Assistant Commissioner for Forestry for England and Wales. See TNA PRO MT 95/503, Letter from Sir Owen Williams to J.D.W. Jeffery, Ministry of Transport and Civil Aviation, 13 Feb. 1957.

[72] S. Crowe, 'Roads through the landscape', *The Times* (20 May 1959), p. 11.

[73] A.J. Harris, 'The London/York motorway: an engineer's view', *Architects' journal* **130** (1959), p. 162.

[74] Crowe, *The landscape of roads*, pp. 94, 93.

[75] *Ibid.*, p. 57.

[76] B. Colvin, 'The London–Birmingham motorway: a new look at the English landscape', *Geographical magazine* **32** (1959), p. 243.

[77] Sir Owen Williams, cited in D. Cottam, 'Selected projects: M1 motorway', in G. Stamp, ed., *Sir Owen Williams 1890-1969* (London, Architectural Association, 1986), p. 139.

[78] Sir Owen Williams, paraphrased account of speech in: 'Minister visits the motorway', *Team spirit: the monthly news sheet issued by John Laing and Son Limited* **141** (July 1958), p. 5. Although Sir (Evan) Owen Williams and his son and partner, Owen Tudor Williams, wrote a number of papers and articles on the design of the M1, these tended to focus on the civil engineering dimensions of the scheme. Sir Owen did not engage in any published discussions on the aesthetics of the bridges, although other engineers defended the use of the solid

parapets and centre supports for reasons of economy and functionality. See Sir E.O. Williams and O.T. Williams, 'The London–Birmingham motorway: Luton–Dunchurch: design and execution', *Proceedings of the Institution of Civil Engineers* **15** (1960), pp. 353–86; Sir E.O. Williams, 'The London–Birmingham motorway', *Financial Times civil engineering supplement* (10 Nov. 1958); 'Discussion on the London–Birmingham motorway', *Proceedings of the Institution of Civil Engineers* **19** (1961), pp. 61–119.

[79] B. Spence, 'Inaugural address of the president', *RIBA journal* **67** (1959), p. 36.

[80] Crowe, *The landscape of roads*, p. 94.

[81] S. Crowe, 'The landscape of roads', *Journal of the Institution of Highway Engineers* **9** (1962), p. 225.

[82] 'London–Birmingham motorway: landscaping recommendations', *Surveyor and municipal and county engineer* **118** (1959), p. 623.

[83] J.W.R. Adams, 'Trunk roads: the work of the Landscape Advisory Committee', *Journal of the Institute of Landscape Architects* **60** (1962), p. 4.

[84] Harris, 'The London/York motorway', p. 165.

[85] I. Nairn, 'Look out', *Architectural review* **133** (1963), p. 426.

[86] Banham, 'New way north', p. 242. In his *Guide to modern architecture* (London, Architectural Press, 1962), Reyner Banham chose his words more carefully, stating that Sir Owen Williams's early work 'helped to build him an impressive reputation' which was 'now somewhat diminished by his rather unimpressive work on the M1 motorway' (p. 62).

[87] R. Banham, 'The road to ubiquopolis', *New Statesman* **59** (1960), p. 786. For an earlier appreciation of some of Williams's prewar structures, see J.M. Richards, *An introduction to modern architecture* (Harmondsworth, Penguin, 1940). As Gavin Stamp has argued, Owen Williams 'was, in many ways, a man of the Establishment' and was never a 'conventional avant-garde architect', although his pioneering use of reinforced concrete and glass in the 1920s and 1930s brought him great respect from British and European proponents of the Modern movement. See G. Stamp, 'Sir Owen Williams and his time', in *Sir Owen Williams*, p. 7. Williams turned down two separate invitations to join the Modern Architectural Research Group (the British group affiliated to the Congrès Internationaux d'Architecture Moderne). See Stamp, *Sir Owen Williams*; D. Yeomans and D. Cottam, *The engineer's contribution to contemporary architecture: Owen Williams* (London, Thomas Telford, 2001).

[88] Banham, 'The road', p. 784.

[89] J. Betjeman, 'Men and buildings: style on road and rail', *Daily Telegraph and Morning Post* (27 June 1960), p. 15. Betjeman did not elaborate on this comment, but it is likely that his reasoning would have been very different from Banham's.

[90] N. Pevsner, *Northamptonshire* (Harmondsworth, Penguin, 1961), p. 66; cf. N. Pevsner, *Buckinghamshire* (Harmondsworth, Penguin, 1960). On the rivalry between, and differing architectural viewpoints of, Betjeman and Pevsner, see T. Mowl, *Stylistic cold wars: Betjeman versus Pevsner* (London, John Murray, 2000). Pevsner was Banham's PhD supervisor at the Courtauld Institute between 1952 and 1958.

[91] Crowe, *The landscape of roads*, pp. 95, 116; see also S. Crowe, 'The London/York motorway: a landscape architect's view', *Architects' journal* **130** (1959), pp. 156–61.

[92] Colvin, 'The London–Birmingham motorway', p. 246.

[93] Sir Owen Williams and Partners [A.P. Long], *London–Yorkshire Motorway (south of Luton–Watford Gap–Dunchurch special road). Landscape report and model* (London, Sir Owen Williams & Partners, 1957). A copy is held in the offices of Owen Williams in Birmingham.

[94] TNA PRO MT 123/59, 'Advisory Committee on the Landscape Treatment of Trunk Roads. Minutes of 15th meeting held in Room 6042 Berkeley Square House at 3p.m. on Wednesday 17th July, 1957', LT/M 15, 9 Aug. 1957.

[95] TNA PRO MT 123/59, 'Advisory Committee on the Landscape Treatment of Trunk Roads. Note of a meeting of sub-committee on 28th January, 1958', LT/61; 'Advisory Committee on the Landscape Treatment of Trunk Roads. Minutes of 21st meeting held in Room 6042 in Berkeley Square House at 3p.m. on Wednesday 12th February, 1958', LT/M 21; TNA PRO MT 121/78, L.E. Morgan, 'London-Yorkshire Motorway: landscaping proposals. Meeting between representatives of Sir Owen Williams & Partners and Ministry of Transport and Civil Aviation, 27 Feb. 58', 7 Mar. 1958.

[96] TNA PRO MT 123/59, 'London–Birmingham Motorway. Mr. Williams-Ellis' observations arising from the committee's inspection of the motorway on 21st May, 1959', LT/113.

[97] Sir Owen Williams and Partners [Sir William Ling Taylor], *London–Yorkshire Motorway: south of Luton–Watford Gap–Dunchurch–Crick special road. Interim report at end of first planting season* (London, Sir Owen Williams & Partners, 1960). A copy is held in the offices of Owen Williams in Birmingham.

[98] See TNA PRO MT 121/182 and TNA PRO MT 121/359.

[99] TNA PRO MT 121/150, 'Advisory Committee on the Landscape Treatment of Trunk Roads. Minutes of 34th meeting held in Room 6042 Berkeley Square House at 3p.m. on Wednesday 8th July, 1959', LT/M 34.

[100] TNA PRO MT 121/355, 'Advisory Committee on the Landscape Treatment of Trunk Roads. Minutes of 38th meeting held in Room 6042 Berkeley Square House at 3p.m. on Wednesday 9th December, 1959', LT/M 38.

[101] TNA PRO MT 121/182, Letter from G. Langley-Taylor to T.R. Newman, Ministry of Transport, 26 Jan. 1960.

[102] TNA PRO MT 121/355, 'ACLTTR. Minutes of 38th meeting', LT/M 38.

[103] Astragal, 'Pull-up for socks?', *Architects' journal* **132** (1960), p. 417.

[104] R. Spurrier, 'Road-style on the motorway', *Architectural review* **128** (1960), p.406.

[105] TNA PRO MT 123/59, 'Advisory Committee on the Landscape Treatment of Trunk Roads. Minutes of 21st meeting held in Room 6042 in Berkeley Square House at 3p.m. on Wednesday 12th February, 1958', LT/M 21.

[106] TNA PRO MT 123/59, Letter from E.P. King to J.D.W. Jeffery, 15 July 1959.

[107] Sir Owen Williams and Partners, *London–Yorkshire Motorway. Landscape report and model*, p. 5.

[108] *Ibid.*

[109] *Ibid.*, p. 6.

[110] TNA PRO MT 121/360, 'Advisory Committee on the Landscape Treatment of Trunk Roads. Landscaping of service areas on M1', LT/167, undated, *c.* July 1960.

[111] *Ibid.*

[112] TNA PRO MT 121/355, 'Advisory Committee on the Landscape Treatment of Trunk Roads. Minutes of 45th meeting held in Room 6042, Berkeley Square House at 3p.m. on Wednesday 10th August, 1960', LT/M 45.

[113] I. Nairn, 'Outrage twenty years after', *Architectural review* **158** (1975), p. 329.

[114] J.M. Way, 'Wildlife on the motorway', *New scientist* **47** (1970), pp. 536–37; B. de Hamel, *Roads and the environment* (London, HMSO, 1976).

[115] See e.g. R.K. Tabor, ed., *Motorways and the biologist: proceedings of a symposium held on 25th October 1973* (London, North East London Polytechnic Motorway Research Project, 1973); J.M. Way, *Grassed and planted areas by motorways (occasional reports no. 3)*

(Abbots Ripton, Institute of Terrestrial Ecology Monks Wood Experimentation Station, 1976).

[116] A. Saint, quoted in J. Glancey, 'A bridge too far ?', *Independent magazine* (18 July 1992), p. 30. When I telephoned English Heritage in Oct. 2000 they stated that 'listing' had never been investigated in any depth.

[117] Colvin, *Land and landscape*, p. 243.

[118] See Matless, *Landscape and Englishness*; D. Matless, '*Ordering the land: the "preservation" of the English countryside, 1918–1939*' (PhD thesis, University of Nottingham, 1990); Merriman, *Driving spaces*; Merriman, *'M1'*.

[119] Harvey, 'Brenda Colvin'; S. Crowe, 'From coast to coast', *Journal of the Institute of Landscape Architects* **44** (1958), pp. 4–6.

[120] On the attempts of different authorities to shape and govern the conduct of motorway drivers, see P. Merriman, 'Materiality, subjectification and government: the geographies of Britain's Motorway Code', *Environment and planning D: society and space* **23** (2005), pp. 235–50; P. Merriman, '"Mirror, signal, manoeuvre": assembling and governing the motorway driver in late fifties Britain', in S. Böhm, C. Jones, C. Land and M. Paterson, eds, *Against automobility* (Oxford, Basil Blackwell, forthcoming).

[121] M. Baker, *Discovering M1* (Tring, Shire, 1968), p. 3.

[122] For a non-representational account of the relational construction of places, see N. Thrift, 'Steps to an ecology of place', in D. Massey, J. Allen and P. Sarre, eds, *Human geography today* (Cambridge, Polity Press, 1999), pp. 295–322.